Appln. No.: 09/893,421

Response/Amendment dated May 7, 2007

Response to Office Action dated February 6, 2007

REMARKS/ARGUMENTS

Claims 45-100 are pending in the application. Claims 45-100 are rejected. No new matter has been added. As explained in more detail below, Applicants submit that all claims are in condition for allowance and respectfully request such action.

Finality of the Office Action

Applicants respectfully request clarification for the finality of the Office Action dated

February 6, 2007. As provided in the M.P.E.P.:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c)

with the fee set forth in 37 CFR 1.17(p).

(M.P.E.P. §706.07(a); emphasis added). The Action provides new grounds for rejection that was not "necessitated by applicant's amendment of the claims nor based on information submitted in

an information disclosure statement filed during the period set forth in 37 CFR 1.97(c)." In fact, Applicants did not amend any claims in the Response dated November 30, 2006. Rather,

Applicants' arguments distinguished the cited art from the instant application resulting in Office

Actions having new grounds for rejections issued on September 14, 2006 and again on February

6, 2007. Applicants, therefore, respectfully request clarification for the finality of the Office Action dated February 6, 2007, or in the alternative respectfully request the withdrawal of the

reversal of the finality of the Action.

Claim Rejections - 35 USC § 103

Claims 45-100 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gotwald (US 5,987,518) in further view of Banker et al. (US 5,497,187). Applicants respectfully

traverse the rejection in view of the Remarks below.

The rejection relies upon the same primary reference, Gotwald, coupled with a new

secondary reference, Banker, which replaced Addington. Applicants respectfully submit that Banker suffers from the same deficiencies as Addington. Namely, Banker does not teach,

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disclose, or even suggest "a plurality of hierarchically modulated simultaneously transmitted data streams" as recited in the independent claims. In fact, the data streams discussed in the cited portion of Banker (see Col. 11, lines 1-17, showing streams (7), (8), and (9)) are not simultaneously transmitted. Rather, as shown in Figure 5(a) the data streams are transmitted in a serial (back-to-back) arrangement. Moreover, when discussing the transmission of data streams, Banker explicitly states "[d]ifferent groups of data are transmitted on a serial data channel...." (Col. 10, 1l. 37-38; emphasis added). As understood to one skilled in the art, a back-to-back arrangement transmitted on a serial data channel does not teach or even suggest "a plurality of hierarchically modulated simultaneously transmitted data streams."

Further, neither Gotwald nor Banker teach or even suggest hierarchically modulation as recited in the rejected claims. The specification of Gotwald states that the prioritizing queuing is described in greater detail in connection with Figs 4 and 5. (see Col. 4, lines 25 – 28 and 34 – 36). Figure 4 illustrates priority queuing using priority module 48 as an example before entering the multiplexing driver. As explicitly stated, "[e]ach message that enters the MPEG2 multiplexing driver (FIG. 2) has an associated priority assigned to it." (Col. 5, lines 60 – 1) Thus, the only prioritizing is performed within the priority module and not afterwards, for example, at the multiplexing driver. In fact, as set forth in the Gotwald:

The driver processes the queue from head (FIFO 108) to tail (FIFO 100). Messages with the <u>same priority</u> are processed in a <u>first-in first-out manner</u>. Each FIFO represents a different priority level, with the highest priority being assigned to the head FIFO 108 and the lowest priority (priority band 0) associated with the tail FIFO 100.

(Col. 5, lines 62 – 67, emphasis added). Therefore, the data is only prioritized among that individual protocol type (i.e., MPEG2 data, IP data, and MPEG2 control messages) and then broadcast in a high to low priority, where those of the same priority are broadcast in a first in – first out manner across a single broadcast channel.

Moreover, as shown in Figure 4 of the present application, unlike merely prioritizing MPEG2 data, IP data, MPEG2 control messages, or other distinct information by only the protocol, aspects of the invention allow the prioritization of data within these protocols, such as text, graphics, data files, email and video. Looking more closely at figure 4, one can see the advantages of the recited claims over Gotwald and/or Banker. Figure 4 illustrates the use of a

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plurality of hierarchically modulated simultaneously transmitted data streams which respectively have a different priority assigned to the contents therein corresponding to a particular class of the

content. As explained in the Substitute Specification, the classifier 35 may assign priority of the

data classes or types according to user profiles, such as illustrated profiles A and B shown in

Figure 4. "The data is then encoded and placed in data containers before being passed to splitter

22 which identifies from the containers the priority assigned to their contents and passes them to

the appropriate stream 24,26 [as opposed to a single multiplexed stream] for transmission by the

transmitter 11." (Sub. Spec., para. 0026).

In the illustrated example, profile A relates to a mobile terminal and profile B relates to a

fixed terminal. In the example, the mobile terminal profile ("A") has the "text" data type set to a HP stream while the "video" data type is set to a LP stream. In the described embodiment, the

HP stream is more reliable (a receiver can more easily identify a quadrant over a particular

constellation point), however, the bit rate of the HP stream will be less than that of the LP

stream. Thus, the LP stream may be utilized by the receiver where the C/N ratio is such as to

allow the receiver to detect **not only** the quadrant **but also** a particular constellation point.

Likewise, Banker appears to merely show the serial transmission of different channels, and does

not perform hierarchical modulation as recited. Therefore, there can be no "hierarchically modulated simultaneously transmitted data streams which respectively have a different priority

modulated simultaneously transmitted data streams which respectively have a different priorit

assigned to the contents therein corresponding to a particular class of the content," for example,

as recited in claims 45, 50, 56, and 59.

For at least the reasons articulated above, Applicants respectfully request reconsideration

and withdrawal of the rejection.

CONCLUSION

All rejections having been addressed, applicant respectfully submits that the instant

application is in condition for allowance, and respectfully solicits prompt notification of the same. Should the Examiner have any questions, the Examiner is invited to contact the

same. Should the Examiner have any questions, the Examiner is invited to contact the

undersigned at the number set forth below.

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Applicant believes there is no fee due in association with the filing of this response, however, should there be any fees due the Commissioner is hereby authorized to charge any such fees or credit any overpayment of fees to Deposit Account No. 19-0733.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: May 7, 2007 By:

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